Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. – 87.   (Cancelled)

88.   (Currently Amended) A method to configure, via a management interface, an Impulse Noise Protection (INP) capability of a transceiver comprising:

receiving information, at the management interface, indicating a repetition period of impulse noise events, the repetition period indicating how often impulse noise events occur on a communications channel; and

updating, based on the received information, a first INP value in the transceiver to a second, different, INP value, the first INP value specifying a first number of corrupted DMT symbols that are correctable by the transceiver and the second INP value specifying a second number of corrupted DMT symbols that are correctable by the transceiver, wherein the second number is different than the first number, wherein the updating from first INP value to the second INP value occurs during Showtime without reinitializing the transceiver.

89.   (Previously Presented) The method of claim 88, wherein the received information indicates the presence of periodic impulse noise due to AC power lines.

90.   (Previously Presented) The method of claim 88, wherein the repetition period includes information on how often the impulse noise is occurring and the information further includes a length of one or more impulse noise events.

91.   (Previously Presented) The method of claim 88, wherein the second number is different than the first number because an interleaving function spreads an impulse noise event over a period of time that exceeds the repetition period.

92.   (Previously Presented) The method of claim 88, wherein a service provider or operator updates the first INP value.

93.   (Previously Presented) The method of claim 88, wherein a management module automatically updates the first INP value.

94.   (Previously Presented) The method of claim 88, wherein a message is used to communicate the second INP value.

95.   (Previously Presented) The method of claim 90, wherein the length of the impulse noise exceeds a correction capability of the first INP value.

96.   (Currently Amended) A method to configure, via a management interface, an Impulse Noise Protection (INP) capability of a transceiver comprising:

configuring, at the management interface, a first INP value, the first INP value specifying a first number of corrupted DMT symbols that are correctable by the transceiver;

receiving impulse noise information, at the management interface, indicating a repetition period of impulse noise events, the repetition period indicating how often impulse noise events occur on a communications channel, wherein the received impulse noise information indicates a requirement to increase the first INP value; and

updating, based on the received information, the first INP value in the transceiver to a second, greater, INP value, the second INP value specifying a second number of corrupted DMT symbols that are correctable by the transceiver, wherein the second number is different than the first number, wherein the updating from first INP value to the second INP value occurs during Showtime without reinitializing the transceiver.

97.   (Previously Presented) The method of claim 96, wherein the received information indicates the presence of periodic impulse noise due to AC power lines.

98.   (Previously Presented) The method of claim 96, wherein the repetition period includes information on how often the impulse noise is occurring and the impulse noise information further includes a length of one or more impulse noise events.

99.   (Previously Presented) The method of claim 96, wherein the received impulse noise information indicates an impact of impulse noise.

100.   (Previously Presented) The method of claim 96, wherein a service provider or operator updates the first INP value.

101.   (Previously Presented) The method of claim 96, wherein a management module automatically updates the first INP value.

102.   (Previously Presented) The method of claim 96, wherein a message is used to communicate the second INP value.

103.   (Previously Presented) The method of claim 96, wherein the second number is different than the first number because an interleaving function spreads an impulse noise event over a period of time that exceeds the repetition period.

104.   (Currently Amended) A method to configure, via a management interface, an Impulse Noise Protection (INP) capability of a transceiver comprising:

configuring, at the management interface, a first INP value, the first INP value specifying a first number of corrupted DMT symbols that are correctable by the transceiver;

receiving impulse noise information, at the management interface, indicating a repetition period of impulse noise events, the repetition period indicating how often impulse noise events occur on a communications channel, wherein the received impulse noise information indicates a requirement to decrease the first INP value; and

updating, based on the received information, the first INP value in the transceiver to a second, lesser, INP value, the second INP value specifying a second number of corrupted DMT symbols that are correctable by the transceiver, wherein the second number is different than the

first number, wherein the updating from first INP value to the second INP value occurs during Showtime without reinitializing the transceiver.

105.   (Currently Amended) A system for configuring, via a management interface, an Impulse Noise Protection (INP) capability of a transceiver comprising:

means for receiving information, at the management interface, indicating a repetition period of impulse noise events, the repetition period indicating how often impulse noise events occur on a communications channel; and

means for updating, based on the received information, a first INP value in the transceiver to a second, different, INP value, the first INP value specifying a first number of corrupted DMT symbols that are correctable by the transceiver and the second INP value specifying a second number of corrupted DMT symbols that are correctable by the transceiver, wherein the second number is different than the first number, wherein the updating from first INP value to the second INP value occurs during Showtime without reinitializing the transceiver.

106.   (Previously Presented) The system of claim 105, wherein the received information indicates the presence of periodic impulse noise due to AC power lines.

107.   (Previously Presented) The system of claim 105, wherein the repetition period includes information on how often the impulse noise is occurring and the information further includes a length of one or more impulse noise events.

108.   (Previously Presented) The system of claim 105, wherein the second number is different than the first number because an interleaving function spreads an impulse noise event over a period of time that exceeds the repetition period.

109.   (Previously Presented) The system of claim 105, wherein a service provider or operator updates the first INP value.

110.   (Previously Presented) The system of claim 105, wherein a management module automatically updates the first INP value.

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111.   (Previously Presented) The system of claim 105, wherein a message is used to communicate the second INP value.

112.   (Previously Presented) The system of claim 105, wherein the length of the impulse noise exceeds a correction capability of the first INP value.

113.   (Currently Amended) A system for configuring, via a management interface, an Impulse Noise Protection (INP) capability of a transceiver comprising:

means for configuring, at the management interface, a first INP value, the first INP value specifying a first number of corrupted DMT symbols that are correctable by the transceiver;

means for receiving impulse noise information, at the management interface, indicating a repetition period of impulse noise events, the repetition period indicating how often impulse noise events occur on a communications channel, wherein the received impulse noise information indicates a requirement to increase the first INP value; and

means for updating, based on the received information, the first INP value in the transceiver to a second, greater, INP value, the second INP value specifying a second number of corrupted DMT symbols that are correctable by the transceiver, wherein the second number is different than the first number, wherein the updating from first INP value to the second INP value occurs during Showtime without reinitializing the transceiver.

114.   (Previously Presented) The system of claim 113, wherein the received information indicates the presence of periodic impulse noise due to AC power lines.

115.   (Previously Presented) The system of claim 113, wherein the repetition period includes information on how often the impulse noise is occurring and the information further includes a length of one or more impulse noise events.

116.   (Previously Presented) The system of claim 113, wherein the received impulse noise information indicates an impact of impulse noise.

117. (Previously Presented) The system of claim 113, wherein a service provider or operator updates the first INP value.

118. (Previously Presented) The system of claim 113, wherein a management module automatically updates the first INP value.

119. (Previously Presented) The system of claim 113, wherein a message is used to communicate the second INP value.

120. (Previously Presented) The system of claim 113, wherein the second number is different than the first number because an interleaving function spreads an impulse noise event over a period of time that exceeds the repetition period.

121. (Currently Amended) A system for configuring, via a management interface, an Impulse Noise Protection (INP) capability of a transceiver comprising:

means for configuring, at the management interface, a first INP value, the first INP value specifying a first number of corrupted DMT symbols that are correctable by the transceiver;

means for receiving impulse noise information, at the management interface, indicating a repetition period of impulse noise events, the repetition period indicating how often impulse noise events occur on a communications channel, wherein the received impulse noise information indicates a requirement to decrease the first INP value; and

means for updating, based on the received information, the first INP value in the transceiver to a second, lesser, INP value, the second INP value specifying a second number of corrupted DMT symbols that are correctable by the transceiver, wherein the second number is different than the first number, wherein the updating from first INP value to the second INP value occurs during Showtime without reinitializing the transceiver.